

a seat cover that substantially encapsulates the porous member to the support member.

3. (Amended) An apparatus for selectively varying the environmental temperature of a vehicle seat comprising:

a seat cushion in the seat formed from a resilient material including:

an integral air flow channel extending vertically therethrough from a top surface of the seat cushion to a bottom surface of the seat cushion, wherein the air flow channel has an inlet adjacent the bottom surface of the seat cushion for receiving temperature conditioned air therein, and further has an outlet adjacent the top surface of the seat cushion for dispensing temperature conditioned air therefrom; and

a porous member which substantially covers the top surface area of the seat cushion;

at least one air subchannel that is molded or formed in the seat cushion and extends adjacent [integral with and extends along] the top surface of the seat cushion, wherein the air subchannel is connected with the outlet of the air flow channel, and wherein the porous member is contact with the air subchannel; **[and]**

an air-impermeable barrier on a side of the air subchannel opposite the top surface of the support member; and

a seat covering substantially encapsulating the porous member to the seat cushion.

4. (Amended) An apparatus for selectively varying the environmental temperature of a vehicle seat comprising:

a seat cushion in the seat formed from a resilient material including:

an integral air flow channel extending vertically therethrough from a top surface of the seat cushion to a bottom surface of the seat cushion, wherein the air flow channel has an inlet adjacent the bottom surface of the seat cushion for receiving temperature conditioned air therein, and further has an outlet adjacent the top surface of the seat cushion for dispensing temperature conditioned air therefrom; and

a porous member which substantially covers the top surface area of the seat cushion;

at least one air subchannel that is molded or formed in the seat cushion and extends adjacent [is integral with and extends along] the top surface of the seat cushion, wherein the air subchannel is connected with the outlet of the air flow channel, and wherein the porous member is contact with the air subchannel;

an air-impermeable barrier on a side of the air subchannel opposite the top surface of the support member;

an air manifold integral with and extending along the top surface of the seat cushion, wherein the air manifold is interposed between the outlet of the air flow channel and the air subchannel to facilitate the distribution of temperature conditioned air therebetween; and

a seat covering substantially encapsulating the porous member to the seat cushion.

5. (Amended) Apparatus for selectively varying the environmental temperature of a vehicle seat comprising:

a support member in the seat in the form of a resilient cushion, wherein the support member includes:

an air flow channel integral with the support member and extending therethrough from a bottom surface to a top surface of the support member, wherein the air flow channel has an inlet at the bottom surface for receiving temperature conditioned air, and an outlet at the top surface for dispensing temperature conditioned air;

at least one air subchannel that is molded or formed in the support member and extends adjacent [integral with and extending along] the top surface of the support member; **[and]**

an air-impermeable barrier on a side of the air subchannel opposite the top surface of the support member;

an air manifold integral with and extending along the top outer surface of the support member between the air flow channel outlet and the air subchannel for dispersing temperature conditioned air from the air flow channel to the air subchannel; **[and]**

a flexible porous member disposed over the top surface of the support member and having an interface with the air subchannel; and

a flexible seat cover substantially encapsulating an outer surface of the flexible

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porous member.

8. (Amended) A method for selectively varying the environmental temperature of a vehicle seat comprising the steps of:

routing temperature conditioned air from an air inlet to an air outlet of an air flow channel extending through a support member of the seat;

distributing temperature conditioned air from the air outlet along a top surface of the support member through at least one air subchannel disposed within the top surface;
and

passing temperature conditioned air from the air subchannels in a direction opposite an air-impermeable barrier, through a porous member disposed adjacent the top [outer] surface, and then to a seat covering disposed adjacent the porous member.

10. (Amended) An apparatus for selectively varying the environmental temperature of a seat, comprising:

a support member in the seat, the support member being formed from a first surface adjacent an occupant of the seat when in use and an opposing second surface further away from the occupant when in use;

an integral airflow sub-channel that is molded or formed in the support member and extends adjacent the first surface of the support member, the sub-channel having walls, an inlet to receive temperature conditioned air, and an outlet at the first surface of the support member for dispensing temperature-conditioned air therefrom; and

an air-impermeable barrier on a side of the airflow sub-channel opposite the (top) ^{first} surface of the support member.

11. (Amended) An apparatus as defined in Claim 10, further comprising a layer of air-permeable support material abutting the first surface of the support member and covering the airflow sub-channel.

12. (Amended) An apparatus as defined in Claim 11, wherein the layer of air-permeable support material comprises a layer of adhesive-backed material.

13. (Amended) An apparatus as defined in Claim 11, wherein the support member comprises a resilient material, and the layer of air-permeable support material is substantially less stretchable than the resilient material of the support member.

14. (Amended) An apparatus as defined in Claim 11, further comprising a porous member which substantially covers the layer of air-permeable support material and a seat covering substantially encapsulating the layer of air-permeable support material to the support member.

15. (Amended) An apparatus for selectively varying the environmental temperature of a seat, comprising:

a support member in the seat, the support member being formed from a first surface adjacent an occupant of the seat when in use and an opposing second surface further away from the occupant when in use;

an integral airflow sub-channel extending along the first surface of the support member, the sub-channel having walls, an inlet to receive temperature conditioned air, and an outlet at the first surface of the support member for dispensing temperature-conditioned air therefrom; and

a liner placed in the airflow sub-channel, the liner having paths for air to pass through the liner to the first surface.

16. (Amended) An apparatus as defined in Claim 15, wherein the liner is configured to resist crushing of the airflow sub-channel when the weight of a seat occupant is placed on the support member and the airflow sub-channel.

17. (Amended) An apparatus as defined in Claim 15, wherein the liner is affixed to the walls of the airflow sub-channel.

18. (Amended) An apparatus as defined in Claim 10, wherein the airflow sub-channel comprises a first and second plurality of airflow sub-channels oriented perpendicular to each other.

19. (Amended) An apparatus as defined in Claim 11, wherein the layer of air-permeable support material is adhered to the top surface of the support member.

20. (Amended) An apparatus as defined in Claim 11, wherein the layer of air-permeable support material has a plurality of holes.

21. (Amended) An apparatus as defined in Claim 10, wherein the temperature-conditioned air is routed from the first surface of the support member to the second surface of the support member.

28. (Amended) A method for selectively varying the environmental temperature of a seat, comprising the steps of:

routing temperature-conditioned air from an air inlet to an air outlet of an airflow channel extending through a support member of the seat;

distributing temperature-conditioned air from the air outlet along a top surface of the support member to at least one air subchannel disposed within the top surface;

passing the air through an air-porous member positioned on the support member and over the at least one air subchannel, through an intermediate layer interposed between the support member and the air-porous member, and away from an air-impermeable barrier located on a side of the air subchannel opposite the air-porous member; and

passing temperature-conditioned air from the air subchannels through the porous member and subsequently to a seat covering substantially encapsulating the air-porous member to the support member.

30. (Amended) A method as recited in Claim 28, wherein the support member comprises a resilient material, and the air-porous member comprises a layer of air-permeable support material which is selected to be substantially less stretchable than the resilient material of the support member.

31. (Amended) A method for selectively varying the environmental temperature of a seat, comprising the steps of:

routing temperature-conditioned air from an air inlet to an air outlet of an airflow channel extending through a support member of the seat;

distributing temperature-conditioned air from the air outlet along a top surface of the support member to at least one air subchannel disposed within the top surface;

placing a liner in the air subchannel to resist crushing of the air subchannel when the weight of a seat occupant is placed on the support member and the air subchannel;

passing the air through an air-porous member positioned on the support member and over the at least one air subchannel; and

passing temperature-conditioned air from the air subchannels through the porous member and subsequently to a seat covering substantially encapsulating the air-porous member to the support member.

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32. (Amended) A method as recited in Claim 31, comprising the further step of passing air through the liner to the air-porous member.

33. (Amended) A method as recited in Claim 32, comprising the further step of affixing the liner to a wall of the air subchannel and passing the temperature-conditioned air through the liner as it is affixed to the wall.

35. (Amended) A method as recited in Claim 28, wherein the air-porous member is adhered to the support member so that the air-porous member helps to resist collapse and blockage of the air subchannel as air passes therethrough.

37. (Amended) A method as recited in Claim 28, wherein the intermediate layer is selected to comprise a structural screen making it difficult for a seat occupant to feel the channels when the seat occupant is sitting in the seat.

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